

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In The Matter Of The Application	:	Docket No. 03-035-29
Of PacifiCorp For a Certificate of	:	Direct Testimony Of
Convenience and Necessity	:	Cheryl Murray
Authorizing Construction of the	:	For The Committee of
Currant Creek Project	:	Consumer Services

4 February 2004

Redacted

1 Introduction

2 **Q. Please state your name, business address and current position.**

3 A. My name is Cheryl Murray. My business address is 160 East 300 South
4 Salt Lake City, Utah. I am a utility analyst for the Committee of Consumer
5 Services (Committee).

6 **Q. Have you previously presented testimony before this Commission?**

7 A. Yes, I have. I have testified regarding PacifiCorp's (Company) request for
8 a certificate of convenience and necessity for the Gadsby Plant Addition
9 (Docket No. 02-035-34) and in PacifiCorp's request for a tariff rider for
10 Demand Side Management (Docket No. 02-035-T12).

11 **Q. What is the purpose of your testimony?**

12 A. The primary purpose of my testimony is to present the Committee's
13 position regarding PacifiCorp's request for a certificate of convenience and
14 necessity to build the Currant Creek project (Currant Creek). I also
15 address issues relating to PacifiCorp's projected resource-load imbalance,
16 which is the key driver underlying the Company's proposal to certificate
17 and build Currant Creek. Finally, I introduce the testimony of Mr. Randall
18 J Falkenberg, a consultant retained by the Committee to examine the
19 reasonableness of PacifiCorp's economic analysis of Currant Creek and
20 resource alternatives, and the RFP and bid evaluation process.

21 **Q. Has the Company demonstrated that it will have a capacity
22 deficiency?**

23 A. Yes. The Company's 2003 IRP Report shows that projected loads will
24 exceed installed capacity in the near future.

25 **Q. What position did the Committee take regarding the issue of
26 PacifiCorp's resource deficiency in the IRP process?**

27 A. The Committee has supported the acquisition of cost-effective long-term
28 resources. In its 31 March 2003 comments regarding the Company's
29 Integrated Resource Plan (IRP) the Committee stated, "Most significantly,
30 it appears to represent a renewed commitment on the part of PacifiCorp

1 management to again acquire long-term resources to serve its regulated
2 customers”¹

3 **Q. Keeping in mind that the Company proposes to have the Combustion**
4 **Turbine “stage” of the Currant Creek Project operational by June**
5 **2005, how much additional capacity did the Company’s 2003 IRP**
6 **indicate was needed to meet its load requirements in the 2005-2006**
7 **time frame?**

8 A. As the table below illustrates, in fiscal year 2006 (which includes the
9 summer months of calendar year 2005), the Company projects it will have
10 a capacity surplus of only 44MW. With the addition of a 15% reserve
11 margin, however, the Company’s capacity deficiency markedly increases
12 in 2006 to 1,283MW. Thus, 1,283 MW is the additional capacity that the
13 Company requires to maintain a 15% reserve margin.
14

PacifiCorp Capacity Adequacy Assessment

Year	Existing Installed Capacity (MW)	Peak Load (MW)	Peak Load + 15% reserve margin (MW)	Difference between Existing Capacity and peak load (MW)	Difference between Existing Capacity and peak load +15% reserve margin (MW)
2004	8,833	8,774	10,090	59	-1,257
2005	8,894	8,946	10,288	-52	-1,394
2006	8,893	8,849	10,176	44	-1,283
2007	8,800	9,025	10,379	-225	-1,579
2008	8,788	9,331	10,731	-543	-1,943
2009	8,335	9,157	10,531	-822	-2,196
2010	8,335	9,253	10,641	-918	-2,306
2011	8,299	9,472	10,893	-1,173	-2,594
2012	8,119	10,184	11,712	-2,065	-3,593
2013	7,820	10,321	11,869	-2,501	-4,049
2014	7,820	10,379	11,936	-2,559	-4,116

Note: Source of data was from the IRP report page 33

¹ Page 2, 31 March 2003, Recommendation of the Committee of Consumer Services to the Utah PSC, Regarding Acknowledgment of PacifiCorp’s Integrated Resource Plan 2003; Docket No. 03-2035-01.

1 **Q. What was the basis for the 15% reserve margin target?**

2 **A.** PacifiCorp selected 15% during the IRP planning assumption
3 development process. In the Executive Summary of the Company's IRP
4 report, the Company explained its rationale for selecting 15% as follows:

5 Use of this assumption does not presume 15% is the ideal
6 level for reliability purposes. More or less planning margin
7 could be warranted. Rather, the assumption is consistent
8 with the ranges discussed under the FERC Standard Market
9 Design (SMD) proposal, and reinforced by the public input
10 process.

11 (PacifiCorp's March 2003, IRP Report, page 3)
12

13 **Q. Did the Committee have any reason to object to the 15% reserve**
14 **margin target?**

15 **A.** The Committee found 15% to be consistent with what other utilities in the
16 country have selected as a reserve margin target and therefore did not
17 object to its use. However, on page 23 of its IRP comments submitted to
18 the Commission , the Committee stated the following:

19 The criteria for market reliance and the planning reserve
20 margin were arbitrarily chosen;
21

22 In other words, while 15% appeared to be reasonable, it had not
23 been selected based on any reliability analysis that had been
24 conducted with respect to the PacifiCorp System. Other parties
25 expressed similar concerns, and recommended that the Company
26 re-evaluate the use of 15% as the most appropriate target for the
27 PacifiCorp system in its next IRP.

28 **Q. What is the Committee's conclusion concerning PacifiCorp's need**
29 **for capacity?**

30 **A.** Based on the load, resource and reserve margin information presented in
31 the Company's 2003 IRP Report, the PacifiCorp system has a significant
32 capacity deficiency by summer 2005. However, it still remains to be seen
33 whether a 15% system reserve margin is the appropriate target for

1 planning purposes, and that issue is being examined more thoroughly in
2 PacifiCorp's 2004 IRP process.

3 **Q. In October 2003, the Company provided an update to its 2003 IRP**
4 **Report. Was that update considered in the Committee's**
5 **determination of need?**

6 A. In October 2003, the Company submitted an update to its IRP Report that
7 contained a significantly revised load forecast and deficiency calculation.
8 This updated load forecast and deficiency calculation was relied on by Mr.
9 Cassity in his Currant Creek testimony that described PacifiCorp's need
10 for resources. The Committee has given this update less consideration
11 than the acknowledged 2003 IRP Report. While the IRP went through a
12 rigorous public input process and was acknowledged by the Commission
13 in May 2003, the Company's updated load forecast and deficiency
14 calculation has not been fully vetted in a public forum.

15
16 In addition, the Committee submitted data requests (CCS DR Set No. 8) to
17 enable its experts to examine the deficiency calculation in more detail;
18 however, the Company has yet to fully respond to information requested in
19 Data Requests 8.1 and 8.3. The Company alleges that providing such
20 information is overly burdensome. The Committee does not agree with
21 the Company's estimate of time to prepare the data, and would still like
22 PacifiCorp to provide the information. The Company has recently
23 exhibited a willingness to work with us on this issue. Hopefully, we will be
24 able to gain greater clarity on the updated deficiency calculation prior to
25 hearings in this docket. For these reasons, the Committee is not in a
26 position to be able to rely on PacifiCorp's updated load forecast and
27 resource deficiency calculations to assess the validity of the Company's
28 projected resource-load imbalance.

29 **Q. What concerns does the Committee have regarding the updated load**
30 **forecast and deficiency calculation?**

1 A. It has been very difficult to understand the magnitude of the resource
2 deficiency that PacifiCorp currently projects based on its updated
3 methodology and assumptions. First, the new methodology focuses
4 exclusively on the East side of the System. Instead of a deficiency of
5 1,283 MW for the entire PacifiCorp system (as PacifiCorp's acknowledged
6 IRP showed), the new methodology shows a need for 1,094 MW on the
7 East side of the System alone. Absent the additional information that the
8 Committee is seeking in Data Requests 8.1 and 8.3, the Committee is
9 unable to reconcile the huge difference between the 1,283 MW system
10 deficiency identified in the March 2003 IRP Report, and the 1,094 MW
11 East Side deficiency indicated in the Company's IRP update.

12
13 In addition, the updated methodology assumes that there is 550MW of
14 resource outages that add to the capacity deficiency (See Mr. Cassity's
15 Exhibit JC-4). By comparison, Company witness Janet Morrison
16 presented testimony in the Gadsby CCN case in which she calculated a
17 capacity deficiency on the East Side of the System that was based on the
18 assumption of only 277 MW of resource outages. This is an example in
19 which the Company's new assumptions are inconsistent with the last CCN
20 that the Company filed.

21 **Q. Are there steps PacifiCorp could take to satisfy its summer 2005**
22 **needs without the 280MW from Currant Creek?**

23 A. The Company's IRP Update asserts that a 1049 MW deficiency exists for
24 summer 2005. In response to the Committee's Data Request 7.7, the
25 Company indicated that it can access 701 MW of firm transmission access
26 rights, leaving a deficit of 348MW. If Currant Creek generates 280 MW for
27 summer 2005, the remaining deficiency is 68MW. However, whether
28 Currant Creek is the most economical resource that could satisfy the
29 deficiency in 2005 has been very difficult to determine.

30

1 The Company's response to Committee Data Request 7.8 identified the
2 following potential options to satisfy the deficiency:

- 3 • Increase procurement from the demand side management
- 4 request for proposal for firm supply;
- 5 • Modify or expand the load curtailment program;
- 6 • Bi-lateral negotiations with wholesale customers to terminate
- 7 or restate existing agreements;
- 8 • Bi-lateral negotiations with wholesale qualified entities that
- 9 have generation or transmission available north of the
- 10 Wasatch Front South boundary;
- 11 • Negotiate with Qualifying Facilities (QF) that could have
- 12 capacity in place by summer of 2005; and
- 13 • Assess which renewable projects could make deliveries
- 14 above the Wasatch Front South boundary.

15
16 There are currently petitions from Desert Power and US
17 Magnesium before the Commission for determination of avoided costs for
18 power produced from their QFs. The petitioners indicate that these
19 facilities together could produce 150 MW by summer 2005. This is a 50
20 MW increase over what the two facilities currently provide. Furthermore,
21 additional capacity may be available for purchase over the bulk power
22 transmission system, although the Committee has not been able to fully
23 analyze the extent to which transmission rights as well as transmission
24 capacity exist that can be relied on to allow delivery of power North of the
25 Wasatch Front South boundary.

26
27 **Q. What is your conclusion regarding PacifiCorp's evidence supporting**
28 **its need for capacity?**

29 A. The Committee believes that the 2003 IRP Report acknowledged by the
30 Commission provides sufficient evidence that there will be a capacity
31 deficiency in 2005 on a system wide basis. The additional studies that the
32 Company has provided concerning its new load forecast and East Side
33 deficiency calculation have not yet been fully vetted, and the Committee
34 cannot say whether that information is useful in supporting PacifiCorp's
35 need contention.

1 **Q. Did the Committee find problems with the RFP – Bid Evaluation**
2 **process and the Company’s modeling of resource alternatives?**

3 A. Based on his analyses, Mr. Falkenberg concluded that there were
4 substantial problems with both the RFP-Bid Evaluation process and the
5 modeling effort conducted by the Company to determine the least cost
6 (low cost, low risk) resource among the bids and Currant Creek (Next Best
7 Alternative or NBA). For example, the RFP specified a peaking resource
8 (begin confidential) but the evaluation was made against an intermediate-
9 baseload NBA, the RFP requested a contract up to 20 years but the cost
10 analysis was compared against the 35-year life of an intermediate-
11 baseload NBA (end confidential). Mr. Falkenberg’s testimony describes
12 these problems at length and details his concerns.

13 **Q. What conclusion did the Committee reach based on Mr. Falkenberg’s**
14 **analyses?**

15 A. Because of the concerns with PacifiCorp’s modeling of Currant Creek and
16 alternative resources, and problems in the RFP-bid evaluation process,
17 the Committee has not been able to determine whether the Currant Creek
18 project is the most economical resource for meeting PacifiCorp’s future
19 load requirements. The Committee, therefore, cannot recommend to the
20 Commission that the Currant Creek project, as proposed, is the best (low
21 cost, low risk) resource alternative for Utah ratepayers.

22 **Q. Does the Committee have any preliminary recommendations to**
23 **improve the RFP and Bid evaluation process going forward?**

24 A. Yes. It should be apparent that this case has identified serious problems
25 in the existing RFP and bid evaluation process. Absent a 3^d Round of
26 bidding, it is impossible to recreate the outcome of a fair and reasonable
27 bid process. Given the significant problems and missteps in this process,
28 the Committee believes the only reasonable solution is to significantly
29 modify the RFP and bid evaluation process and modeling of resource
30 alternatives.

31

1 The Committee recommends that the Commission immediately open a
2 new docket to correct flaws in the current procedure. Improvements in the
3 drafting of the RFP should include:

4 1 The RFP should specify the book life over which the evaluator
5 will analyze bids. This would presumably be the life of the type
6 of plant sought. Bidders would have the option to submit bids
7 over or under that term.

8 2 Bidders would be provided a copy of the Company's model(s)
9 used in evaluating the alternatives, prior to submitting their bids.
10 Bidders would be allowed the opportunity to self-score their first
11 round bid. The model(s) should not be confidential and a set of
12 test data, perhaps developed from publicly available sources,
13 should be provided.

14 3 The RFP should clarify what is required of the bidders
15 concerning variable O&M and startup costs. These issues
16 caused a tremendous amount of confusion in this case. Bidders
17 should be provided a minimum and maximum number of unit
18 startups that are expected per year. This information would be
19 used by bidders that submit unit contingent sales offers. This
20 gives the bidders the ability to develop a realistic startup cost
21 and a realistic variable O&M cost that can be used to evaluate
22 their bids.

23 4 The RFP should be transparent in all specifications for bids. If
24 the RFP process is labeled for peaking capacity, then it should
25 specify a capacity factor range for which the unit will operate on
26 an annual basis. Or the bidder should be given a load profile for
27 which the bid would reasonably be expected to serve. The type
28 of NBA unit should be identified.

29 5 The final (second round) bid evaluation should be conducted
30 with a production cost model that would fully evaluate the
31 operation of the bid alternatives and the NBA within the context

1 of PacifiCorp's system and monetize reliability impacts. Round
2 1 evaluations can be done without such a model, but only after it
3 has been tested to demonstrate reasonable equivalence with a
4 reasonable production cost model.

5 6 The RFP should define exactly what the negotiation process will
6 entail. It must clarify what should be provided in writing to the
7 Company as part of a formal bid, and what could be decided as
8 offer terms based on subsequent negotiations between bidders
9 and the Company.

10 7 The RFP should clearly identify non-price requirements that
11 bidders must meet to be considered a valid bid. An advantage
12 should be conferred upon bidders that have permits in place,
13 and on bids that contain firm cost figures as opposed to mere
14 estimates.

15 **Q. Does the Committee have any recommendations with regard to the**
16 **certification process?**

17 A. The Commission should require the Company to file any future request for
18 a certificate of convenience and necessity at least four or five months prior
19 to the proposed construction start date. Based on the Gadsby Peaking
20 addition and this current docket, it is clear that parties need more time to
21 adequately evaluate the Company's requests for certificates of
22 convenience and necessity.

23 **Q. Does this conclude your testimony?**

24 A. Yes.

25